#### ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

### **EXECUTIVE SUMMARY**

- **Federal Agency Names:** Climate Program Office (CPO), Office of Oceanic and Atmospheric Research (OAR), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (DOC)
- **Funding Opportunity Title:** NOAA Climate Program Office (CPO) for Fiscal Year (FY) 2007
- Funding Opportunity Number: OAR-CPO-2007-2000636
- Announcement Type: Initial Announcement.
- Catalog of Federal Domestic Assistance (CFDA) Number: 11.431, Climate and Atmospheric Research
- Dates: Letter of Intent Due Date: May 30, 2006, by 5:00 p.m. eastern time. Application Due Date: July 25, 2006 by 5:00 p.m. eastern time.
- **Application Submission:** Applications shall be submitted through Grants.gov APPLY; a date time receipt indication is included and will be the basis of determining timeliness. If the applicant does not have Internet access, please contact the CPO Grants Manager, Diane Brown, NOAA/CPO, 1100 Wayne Avenue, Suite 1210; Silver Spring, MD 20910-5603; phone 301-427-2357.

**Funding Opportunity Description:** The NOAA Climate Program represents a contribution to national and international programs designed to improve our ability to observe, understand, predict, and respond to changes in the global environment. The Program builds on NOAA's mission requirements and long-standing capabilities in global change research and prediction. The Program is a key contributing element of the U.S. Climate Change Science Program (CCSP) that is coordinated by the interagency Committee on Environmental and Natural Resources (CENR). NOAA's Climate Program is designed to complement other agencies' contributions to that national effort.

#### **FULL ANNOUNCEMENT TEXT**

## I. Funding Opportunity Description

### A. Program Objectives

The overall goal of the NOAA Climate Program is to understand climate variability and change to enhance society's ability to plan and respond. The Program aims to advance scientific understanding of the earth's past and present climate variability and change to improve climate forecast skill, increase the credibility of climate change projections, and provide climate information for policy and decision makers and resource managers.

NOAA believes that the Climate Program will benefit significantly from a strong partnership with outside investigators. The broad objective of NOAA's Climate Program is to establish a national information service based on reliable assessments and quantitative predictions of changing global climate. Once established, this service will help NOAA provide high-quality predictions and assessments to the public and private sectors, other federal and state agencies, and the international community. The near-term objective is to provide reliable predictions of global climate changes, both natural and human-induced, and their associated societal impacts on time scales ranging from seasons to a century or more.

NOAA's Climate Program is addressing climate initiatives outlined in the Climate Change Science Program (CCSP) that encompasses both the U.S. Global Change Research Program (USGCRP) and the Climate Change Research Initiative (CCRI). NOAA's program is an integral part of the interagency CCSP. Changing climate confronts us with significant economic, health, safety, and national security implications. NOAA has a significant responsibility in operational observation, research, prediction, and information management efforts for the global change study effort.

### B. Program Priorities

In FY 2007, NOAA will only accept individual proposals in the Program Elements listed below. The names, affiliations, and phone numbers of relevant Program Managers are provided. Investigators are encouraged to visit the Climate Program Office (CPO) website (<a href="http://www.climate.noaa.gov/">http://www.climate.noaa.gov/</a>) for general program information prior to submitting full proposals. Applicants may also communicate with Program Managers for information.

### 1. Atmospheric Composition and Climate (ACC):

The Atmospheric Composition and Climate (ACC) program pursues two overall research objectives: (i) to improve the predictive understanding of the radiative forcing of the climate system by aerosols and by chemically active greenhouse gases, and (ii) to better characterize the recovery of the stratospheric ozone layer and its role in climate change. The integrated research activities that address these objectives involve field and laboratory studies, instrument development, regional to global observations, and

theoretical modeling by NOAA and extramural partners. Primary emphasis is on process research designed to contribute to the improvement of climate modeling ability for decision support.

In FY 2007, the ACC program is soliciting proposals for research in the following areas:

- 1) targeting processes or measurements germane to atmospheric composition that contribute to substantial uncertainty in simulations of aerosol/climate interactions;
- 2) improving the capability of climate models to simulate the influence of aerosol-chemical and aerosol-radiative effects on the radiative balance in the Earth's atmosphere;
- 3) analysis and interpretation of data from the GoMACCS 2006 field campaign.

An information sheet containing further details on FY 2007 ACC priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/acc.html">http://www.climate.noaa.gov/opportunities/acc.html</a>. For further information, investigators should contact Kea Duckenfield (<a href="mailto:kea.duckenfield@noaa.gov">kea.duckenfield@noaa.gov</a>, 301-427-2369, fax: 301-427-2073).

## 2. Climate Change Data and Detection (CCDD):

The goal of the Climate Change Data and Detection (CCDD) program is to provide data and information management support to assure the availability of critical data sets for a variety of international programs and assessments, e.g., the IPCC (Intergovernmental Panel on Climate Change), the U.S. Climate Change Science Program (CCSP), U.S. CLIVAR (Climate Variability and Predictability) Program, the Tri-lateral North American Climate Extremes Assessment, etc. The data and resulting products extend the existing long-term climate record and, also, serve as essential input to predictive models. CCDD provides support for documenting variations in climate on time scales ranging from less than one year to periods of 100 years and longer. Support is also provided for the analysis of observed climate variations and changes to identify causes that are consistent with Earth's long-term climate history.

In FY 2007 the CCDD program is soliciting proposals for research in the following areas:

- 1) development of climate reference data sets;
- 2) climate change detection and attribution studies, in joint sponsorship with the Department of Energy's Climate Change Prediction Program;
- 3) paleoclimate.

An information sheet containing further details on FY 2007 CCDD priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/ccdd.html">http://www.climate.noaa.gov/opportunities/ccdd.html</a>. For further information, investigators should contact Chris Miller (<a href="mailto:christopher.d.miller@noaa.gov">christopher.d.miller@noaa.gov</a>, 301-427-2376, fax: 301-427-2073) or Bill Murray (<a href="william.l.murray@noaa.gov">william.l.murray@noaa.gov</a>, 301-427-2378, fax:

301-427-2073), or, at, DoE Anjuli Bamzai (<u>anjuli.bamzai@science.doe.gov</u>, 301-903-0294, fax: 301-903-8519).

### 3. Climate Dynamics and Experimental Prediction (CDEP):

The National Centers for Environmental Prediction (NCEP) and the Climate Program Office are jointly sponsoring the pilot phase of the Climate Test Bed (CTB) at NCEP. The goal of the CTB is to accelerate the transition of research advancements into improved NOAA operational climate forecasts, products and applications. The CTB will provide an operational testing environment to support short-term competitive applied research and development projects that will result in a direct influence on operational methodologies, and/or new guidance products or techniques leading to improved quality and applicability of operational forecasts. Scientists from the broad research community, other NOAA organizations and NCEP are expected to jointly carry out competitive CTB projects. For further details on the Climate Test Bed, visit <a href="http://www.cpc.ncep.noaa.gov/products/ctb/">http://www.cpc.ncep.noaa.gov/products/ctb/</a>

In FY2007, NOAA is soliciting proposals to initiate one to two pilot CTB projects under the Climate Dynamics and Experimental Prediction (CDEP) program. Due to extremely limited available funding, the priority for FY 2007 is focused entirely on the areas of enhancing of monthly to seasonal climate forecast applications. These include (note this is not a prioritized list):

- 1) verification and skill assessments for operational climate forecasts;
- 2) downscaling of operational climate forecasts to regional and local levels;
- 3) probabilistic forecasts of risks of high-impact weather events;
- 4) forecast of mean temperature, precipitation and other variables where relationships are non-linear;
- 5) new regional/sectoral application products.

An information sheet containing further details on FY 2007 CTB priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/cdep.html">http://www.climate.noaa.gov/opportunities/cdep.html</a>. For further information, investigators should contact Ming Ji (<a href="ming.ji@noaa.gov">ming.ji@noaa.gov</a>, 301-427-2373, fax: 301-427-2073).

## 4. Climate Prediction Program for the America (CPPA):

The goal of the Climate Prediction Program for the Americas (CPPA) is to improve operational intraseasonal to interannual climate and hydrologic predictions for the Americas with quantified uncertainties sufficient for making informed decisions. To achieve its goal, CPPA has the following major objectives: to improve the predictive understanding and model simulation of ocean, atmosphere and land-surface processes, to quantify the sources and limits of predictability of climate variations on intra-seasonal to interannual time scale, to advance NOAA's operational climate forecasts, monitoring,

and analysis systems and to develop climate-based hydrologic forecasting capabilities for decision support and water resource applications.

In FY2007, CPPA is soliciting proposals for research in the following areas:

- 1) predictability studies related to drought, impacts of land and ocean processes, western mountain hydroclimate, and land-atmosphere interactions (including improvements in land component of climate models);
- 2) analysis and modeling studies in support of NAME (North American Monsoon Experiment), VOCALS (VAMOS Ocean-Cloud-Atmosphere-Land-Studies), and MESA (Monsoon Experiment over South America);
- 3) Improving ensemble hydrologic prediction based on climate forecasts;
- 4) synthesis projects to provide linkage to individually funded CPPA projects, the CPPA Core Project and climate and hydrology test beds.

An information sheet containing further details on FY2007 CPPA priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/cppa.html">http://www.climate.noaa.gov/opportunities/cppa.html</a>. For further information, investigators should contact Jin Huang (<a href="mailto:jin.huang@noaa.gov">jin.huang@noaa.gov</a>, 301-427-2371, fax: 301-427-2703), Annarita Mariotti (<a href="mailto:annarita.mariotti@noaa.gov">annarita.mariotti@noaa.gov</a>, 301-427-2390, fax: 301-427-2703), or Kenneth Mooney (<a href="mailto:kenneth.mooney@noaa.gov">kenneth.mooney@noaa.gov</a>, 301-427-2381, fax: 301-427-2073).

#### 5. Climate Variability and Predictability (CVP):

The Climate Variability and Predictability (CVP) program seeks to observe, model and understand patterns of climate variability on intra-seasonal and longer time scales and to assess predictability of such climate variability. The ultimate goal of the program is to develop skilful predictions of climate variability and change on intra-seasonal to multi-decadal time scales and regional spatial scales for optimal use in resource planning and policy decision making. The program is designed to understand global climate variability; to determine the spatial and temporal extent to which this variability is predictable; to develop the observational, theoretical, and computational means to predict variability; and to make enhanced predictions, where feasible.

In FY 2007, in support of U.S. CLIVAR, CVP is soliciting proposals for research in the following areas:

1) activities that exploit the ocean observing system to elucidate the state and variability (including long-term changes) of the coupled climate system (proposed activities may focus on developing new gridded or synthesized products and their use in diagnostic and prediction studies);

- 2) studies to attribute observed climate variability to specific components of the climate system;
- 3) studies of mechanisms that govern decadal variability (including the decadal variability of ENSO) of the coupled climate system and its predictability;
- 4) multiple-model studies that address tropical biases in models used for predictions and projections.

An information sheet containing further details on FY 2007 CVP priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/cvp.html">http://www.climate.noaa.gov/opportunities/cvp.html</a>. For further information, investigators should contact James Todd (<a href="mailto:james.todd@noaa.gov">james.todd@noaa.gov</a>, 301-427-2383, fax: 301-427-2073).

# 6. Global carbon Cycle (GCC):

The goal of the Global Carbon Cycle (GCC) program is to improve our ability to predict the fate of anthropogenic carbon dioxide and future atmospheric carbon dioxide concentrations using a combination of atmospheric and oceanic global observations, process-oriented field studies and modeling.

In FY 2007, GCC is soliciting proposals for research in the following areas:

- 1) Quantifying spatial patterns and variability of carbon sources and sinks on global to regional scales;
- 2) Documenting the fate of anthropogenic carbon dioxide in the atmosphere and oceans;
- 3) Improving future climate predictions by incorporating a dynamic understanding of the carbon cycle into models.

An information sheet containing further details on FY 2007 GCC priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/gcc.html">http://www.climate.noaa.gov/opportunities/gcc.html</a>. For further information, investigators should contact Kathy Tedesco (<a href="https://kathy.tedesco@noaa.gov">kathy.tedesco@noaa.gov</a>, 301-427-2382, fax: 301-427-2073).

### 7. Regional Integrated Sciences and Assessments (RISA):

Climate science and services have the potential to help inform decision making in sectors and regions that are affected by climate variability and change. A multidisciplinary, research, assessment and applications effort is fundamental to creating an effective bridge between societal need and scientific insights and products. The Regional Integrated Sciences and Assessments (RISA) program supports integrated, place-based research across a range of social, natural, and physical science disciplines to expand decision-makers' options in the face of climate change and variability at the regional level. It does

this in a manner that is cognizant of and analyzes the context decision-makers function within and the constraints they face in managing their climate sensitive resources. RISA possesses three distinct qualities: (1) fostering interdisciplinary research and assessment synthesis; (2) improving our understanding of and bridging the gap among climatic, environmental and societal interactions on different temporal and spatial scales; and (3) contributing to regional decision support and climate information service. A successful RISA program requires innovative and embedded long-term partnerships among a spectrum of interested parties including Federal, State, Native, regional, local and private entities.

In FY 2007, RISA is soliciting proposals for the following region:

1) southwestern region of the U.S. (including Arizona and New Mexico).

The proposals must demonstrate partnership among institutions focused on the region and build on existing efforts within the region to study the impacts of climate and expand integrated social, physical, and natural science research in support of climate services. The proposal can be up to 5 years in duration. The proposals for each region will be reviewed in separate competitions.

An information sheet containing further details on FY 2007 RISA priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/risa.html">http://www.climate.noaa.gov/opportunities/risa.html</a>. For further information, investigators should contact Caitlin Simpson (<a href="mailto:caitlin.simpson@noaa.gov">caitlin.simpson@noaa.gov</a>, 301-427-2345, fax: 301-427-2082 or Hannah Campbell (<a href="mailto:hannah.campbell@noaa.gov">hannah.campbell@noaa.gov</a>, 301-427-2394, fax: 301-427-2082)

### 8. Sector Applications and Research Program (SARP):

The Sector Applications Research Program (SARP) seeks to enhance resource management and the development of resilient socio-economic sectors through the support of research activities focused on the role of climate and climate information in decision-making processes. SARP is designed to systematically build an interdisciplinary and expressly applicable knowledge base and mechanism for the creation, dissemination and exchange of social science based research findings critical for understanding and addressing climate-related resource management challenges in vital social and economic sectors.

In FY 2007, SARP is soliciting proposals in two distinct areas.

### 1) SARP Climate and Water Resource Management

Water resources, and the socio-economic activities which depend on them, are closely linked to climate variability and change. Emerging prediction capabilities, coupled with a growing understanding of climate impacts and the potential applications of this science for decision making, offer promising opportunities for the water resources sector. For 2007, the SARP Water Resources Management Project will support research activities that (a) improve decision making by enhancing our knowledge of climate's impact and

our ability to plan for and adapt to future uncertainties through the use of climate information; and (b) specifically address the effects of drought on society and economically productive sectors of the US economy and the expressed needs of decision makers as they confront the challenges of drought planning, mitigation and efforts to incorporate climate variability over years to decades into their planning processes. This latter effort has been made possible through the Climate Assessments and Services Division of the Climate Program Office, and its NIDIS (National Integrated Drought Information System) and Regional Decision Support Partnerships on Coping with Drought (a cross-program initiative that involves SARP, RISA, and the NOAA Climate Transition Program (NCTP)).

An information sheet containing further details on FY 2007 SARP Climate and Water Resource Management priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/sarp.html">http://www.climate.noaa.gov/opportunities/sarp.html</a>. For further information, investigators should contact Nancy Beller-Simms (<a href="management-nancy.beller-simms@noaa.gov">nancy.beller-simms@noaa.gov</a>, 301-427-2351, fax: 301-427-2082).

### 2) SARP Climate and Coastal Resource Management

The SARP Climate and Coastal Resource Management Project was established in 2005 for the purpose of catalyzing and supporting applications research that links climate science with practical challenges in coastal regions. Over 50% of the world's population resides on or near the coast. Coastal communities face a complex suite of interrelated issues which can be affected by climate change and variability, including sea level rise, shoreline erosion, population growth and development, hazard mitigation and the health and well-being of estuarine, coastal wetland and coral reef systems. While there is increasing interest across multiple scales of decision making (community to regional to international) in the identification of vulnerabilities and the development of adaptive measures for coping with climate change and variability in coastal regions, there are gaps in understanding and institutional capacities that must be addressed in order to bring about more effective adaptation methods and resilient socio-economic systems. In 2007, the SARP Coastal Project will support research activities that will lead to improved management of coastal areas and resources through a better understanding of climate impacts and the applications of climate research and information.

An information sheet containing further details on FY 2007 SARP Climate and Coastal Resource Management priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/sarp.html">http://www.climate.noaa.gov/opportunities/sarp.html</a>. For further information, investigators should contact Lisa Vaughan (<a href="lisa.vaughan@noaa.gov">lisa.vaughan@noaa.gov</a>, 310-427-2343, fax: 301-427-2082).

Proposals in each of the two areas will be reviewed in separate competitions.

#### 9. Scientific Data Stewardship (SDS):

The Scientific Data Stewardship (SDS) program seeks to advance our understanding of climate variability and change by introducing new and rigorous approaches to the generation and management of satellite Climate Data Records (CDRs). For example, SDS program activities will seek to provide national leadership for satellite-based Climate Data Record generation by strengthening existing inter-agency cooperative efforts, by developing new relationships that exploit complementary capabilities within the satellite and in-situ data management communities, and by fostering the close, scientific attention to quality and detail needed to satisfy long-standing requirements for a Climate Data Record generation program characterized by consistency and continuity.

To operationally produce Climate Data Records, three functions must be achieved:

- 1) The observing system performance with respect to long-term applications must be monitored in real-time.
- 2) Authoritative, long-term records must be generated.
- 3) Metadata, direct observations, and fundamental records from satellite and supporting in situ platforms must be comprehensive, complete and preserved in perpetuity.

In FY 2007 SDS is soliciting proposals that support the routine, operational production of global Climate Data Records (CDRs) of the atmosphere, oceans, and land surface on a routine and operational basis, with an initial emphasis on satellite observations, and in collaboration with experts in the climate community. Applicants must demonstrate that proposed CDRs have reached a critical level of maturity in science and data preservation to be considered for this Program.

An information sheet containing further details on FY 2007 SDS priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/sds.html">http://www.climate.noaa.gov/opportunities/sds.html</a>. For further information investigators should contact Chris Miller (<a href="mailto:christopher.d.miller@noaa.gov">christopher.d.miller@noaa.gov</a>, 301-427-2376, fax: 301-427-2073), or Bruce Barkstrom (<a href="mailto:bruce.barkstrom@noaa.gov">bruce.barkstrom@noaa.gov</a>, 828-271-4412, fax: 828-271-4328).

## 10. Transition of Research Applications to Climate Services (TRACS):

Climate science and services have the potential to help inform decision making in sectors and regions that are affected by climate variability and change. A multi disciplinary research, assessment, and applications effort is fundamental to creating an effective bridge between societal need and scientific insights and products. Toward this end, the NOAA Climate Assessments and Services Division addresses a spectrum of issues ranging from problem identification and assessment, to the development and transition of science-based solutions and tools, to the articulation of societal need back to the research and services communities.

The mission of the Transition of Research Applications to Climate Services (TRACS) Program (formerly NOAA Climate Transition Program (NCTP)) is to transition experimentally mature climate tools, methods, and processes from research mode into

settings where they may be applied in an operational and sustained manner, generating sustained delivery of useful climate information products and services to local, regional, national, and international decision and policy makers. TRACS seeks not only to support implementation of these transitions, but also to learn from doing how better to accomplish technology transition processes for public goods applications.

Competitive projects require outline of a structured pathway designed to result in the transition of well-developed prototype decision tools into sustained operational activities. TRACS supports well-defined partnerships between researchers, operations staff, decision makers, prototype developers, and extension, outreach, or education elements. Each proposal must have a cost-sharing percentage of at least 5% of total costs.

In FY 2007, the TRACS is soliciting a limited number of new proposals only for applications related to water resources and hydrology that make use of climate-time-scale datasets or probabilistic hydrologic forecasts. The Climate Program is interested in considering proposals in which climate forecasts and outlooks longer than 2 weeks into seasons and years can be used to produce probabilistic hydrologic forecasts that can be applied to water resources applications, particularly related to drought. Examples of applications would be basin- to regional-scale high-resolution (~1km) soil moisture forecasts that can be applied by, for instance, irrigation managers in crop selection, water banking, and/or drought management; strategic reservoir operations planning that allows the substitution of fixed reservoir operating rules by probabilistic real-time reservoir operations of single- or multiple-purpose reservoirs or basin-scale management activities.

An information sheet containing further details on FY 2007 TRACS priorities can be found at <a href="http://www.climate.noaa.gov/opportunities/tracs.html">http://www.climate.noaa.gov/opportunities/tracs.html</a>. For further information, investigators should contact Josh Foster (<a href="josh.foster@noaa.gov">josh.foster@noaa.gov</a>, 301-427-2370, fax: 301-427-2073).

C. Program Authority

49 U.S.C. 44720, 33 U.S.C. 883d, 15 U.S.C. 2904, 15 U.S.C. 2931-2934

#### **II. Award Information**

# A. Funding Availability

NOAA believes that the Climate Program will benefit significantly from a strong partnership with outside investigators. Please be advised that actual funding levels will depend upon the final FY 2007 budget appropriations. In FY 2006, \$6M in first year funding was available for 54 new awards; similar funds and number of awards are anticipated in FY 2007. Total Anticipated Federal Funding for FY 2007 is \$6M in first year funding for 40 - 60 number of awards. Federal Funding for FY 2008 may be used in part to fund some awards submitted under this competition. Current plans assume that 100% of the total resources provided through this announcement will support extramural efforts, particularly those involving the broad academic community. Past or current grantees funded under this announcement are eligible to apply for a new award, which

builds on previous activities or areas of research not covered in the previous award. Current grantees should not request supplementary funding for ongoing research through this announcement. We anticipate that the annual cost of most funded projects will fall between \$50,000 and \$200,000 per year. The exact amount of funds that may be awarded will be determined in pre-award negotiations between the applicant and NOAA representatives. Neither NOAA nor the Department of Commerce is responsible for proposal preparation costs if this program is not funded for whatever reason. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

#### B. Project/Award Period

This Program Announcement is for projects to be conducted by investigators outside the Federal Government, primarily over a 1, 2, or 3 year period; except for the RISA program element which are over a 3-5 year period.

# C. Type of Funding Instrument

The funding instrument for awards will be a grant unless it is anticipated that NOAA will be substantially involved in the implementation of the project, in which case the funding instrument should be a cooperative agreement. Examples of substantial involvement may include, but are not limited to, proposals for collaboration between NOAA or NOAA scientists and a recipient scientist or technician and/or contemplation by NOAA of detailing Federal personnel to work on proposed projects. NOAA will make decisions regarding the use of a cooperative agreement on a case-by-case basis. Funding for contractual arrangements for services and products for delivery to NOAA is not available under this announcement.

#### **III. Eligibility Information**

#### A. Eligible Applicants

Eligible applicants are institutions of higher education, other nonprofits, commercial organizations, international organizations, and state, local and Indian tribal governments. Federal agencies or institutions are not eligible to receive Federal assistance under this notice.

#### B. Cost Sharing or Matching Requirement

Cost Sharing is only required in one program element competition which is the Transition of Research Applications to Climate Services (TRACS) where the Cost Share Percentage must be at least 5% of the total costs. The other ten Competitions have no cost sharing requirement.

### IV. Application and Submission Information

All proposals must be submitted in accordance with the requirements listed below. Failure to heed the requirements will result in proposals being returned without review.

### A. Letter of Intent (LOI)

The purpose of the LOI process is to provide information to potential applicants on the relevance of their proposed project to the Climate program and the likelihood of it being funded in advance of preparing a full proposal. While it is in the best interest of the applicants and their institutions to submit an LOI, it is not a requirement; applicants who do not submit an LOI are allowed to submit a full proposal. Full proposals will be encouraged only for LOIs deemed relevant.

LOIs are encouraged to be submitted by e-mail to the identified NOAA program element's Program Manager.

The LOI should provide a concise description of the proposed work and its relevance to the targeted program element. The LOI should be no more than two pages in length and should include the components listed below. If these components are not included, the LOI risks a delayed response and may not be considered by the program reviewers.

- (1) Identification of the program element that is being targeted in the LOI.
- (2) Specification of a tentative project title in the LOI.
- (3) Name(s) and institution(s) of all principal investigator(s), and specification of which individual is the Lead principal Investigator.
- (4) Statement of the problem.
- (5) Brief summary of work to be completed, methodology to be used, data sets needed or to be collected, and approximate cost of the project.

A panel of Program Managers will review each LOI to determine whether the LOI is responsive to the program goals as advertised in this notice. An LOI response (e-mail or letter) will be sent back to the investigator encouraging or discouraging a full proposal. The final decision to submit a full proposal will be made by the investigator.

#### B. Full Proposal Application

The following forms and elements are required in each application. Failure to comply with these provisions will result in proposals being returned without review.

Full Proposals shall be submitted in electronic form via Grants.gov APPLY. To apply for this NOAA federal funding opportunity, please go to <a href="http://www.grants.gov">http://www.grants.gov</a>, and use the following funding opportunity # OAR-CPO-2007-2000636. If the applicant does not have access to electronic submission, please contact the CPO Grants Manager for instructions on a paper format submission; in such case, it must be mailed to the Climate Program Office and received by the deadline. Facsimile transmissions of full proposals will not be accepted.

Proposals must be limited to 30 pages (numbered), including budget, investigators vitae, and all appendices, and should be limited to funding requests for 1 to 3 year duration; except for the RISA program element which must be a 3-5 year duration. Cooperative agreement proposals may submit a funding request for a 5 year duration. Appended information may not be used to circumvent the page length limit. Federally mandated forms and the NEPA Statement are not included within the page count.

- 1. Required Elements (all full proposals must include the following):
- (1) <u>Title page</u>: The title page shall identify the Principal Investigator (PI) and the institutional representative and should clearly indicate which program element is being addressed. If more than one investigator is listed on the title page, please identify the lead investigator. The PI and institutional representative should be identified by full name, title, organization, telephone number and address. For paper submissions, the title page must be signed by the PI and the institutional representative. The total amount of Federal funds being requested should be listed for each budget period.
- (2) <u>Abstract:</u> An abstract must be included and should contain an introduction of the problem, rationale and a brief summary of work to be completed. The abstract should appear on a separate page, headed with the proposal title, institution(s), investigator(s), total proposed cost and budget period.
- (3) <u>Results from prior research:</u> The results of each prior research project (during the last 3 years) relevant to the proposed effort should be summarized in brief paragraphs. This section should not exceed two pages.
- (4) <u>Statement of work:</u> The proposed project must be completely described, including identification of the problem, scientific objectives, proposed methodology, relevance to the goal of the C&GC program, and the program priorities listed above. Benefits of the proposed project to the general public and the scientific community should be discussed. The statement of work, including references, but excluding figures and other visual materials, must not exceed 15 pages of text. Proposals from 3 or more investigators may include a statement of work containing up to 15 pages of overall project description plus up to 5 additional pages for individual project descriptions.
- (5) <u>Budget Justification:</u> A brief description of the expenses listed on the budget and how they address the proposed work. Item justifications must include salaries, equipment, publications, supplies, tuition, travel, etc.
- (6) <u>Budget:</u> The proposal must include total and annual itemized budgets corresponding with the descriptions provided in the statement of work. Travel must be itemized to include destination, airfare, per diem, lodging and ground travel.
- (7) <u>Vitae</u>: Abbreviated curriculum vitae are sought with each proposal. Reference lists should be limited to all publications in the last three years with up to five other relevant papers.

- (8) <u>Current and pending support:</u> For each investigator, submit a list that includes project title, supporting agency with grant number, investigator months per year, dollar value and duration. Requested values should be listed for pending support.
- (9) <u>DUNS Number:</u> All applications must have a DUNS (Dun and Bradstreet (D&B) Data Universal Numbering System when applying for Federal grants on or after October 1, 2003. No application is deemed complete without the DUNS number and only OMB may grant exceptions.
- (10) National Environmental Policy Act (NEPA): NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals that are seeking NOAA federal funding opportunities. Detailed information on NOAA compliance with NEPA can be found at the following NOAA NEPA website: http://www.nepa.noaa.gov/, including our NOAA Administrative Order 216-6 for NEPA, http://www.nepa.noaa.gov/NAO216\_6\_TOC.pdf, and the Council on Environmental Quality implementation regulations, http://ceq.eh.doe.gov/nepa/regs/ceq/toc\_ceq.htm. Consequently, as part of an applicant's package, and under their description of their program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, species and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems). In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting of an environmental assessment, if NOAA determines an assessment is required. Applicants will also be required to cooperate with NOAA in identifying feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. The failure to do so shall be grounds for not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the Grants Officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on any impacts that a project may have on the environment.

## 2. Submission Dates and Time:

Letters of Intent should be received at the Climate Program Office no later than 5 p.m. Eastern Time, May 30, 2005. Applicants who have not received a response to their Letter of Intent within four weeks should contact the identified NOAA program element's Program Manager. Applicants may submit full proposals even if they do not submit Letters of Intent.

Full proposals must be received no later than 5 p.m. Eastern Time, July 25, 2006. Proposals received after that time will not be considered for funding. A date time receipt indication is included and will be the basis of determining timeliness for applications

submitted through Grants.gov APPLY. Hard copy applications will be date and time stamped when they are received.

# 3. Intergovernmental Review:

Applications under this program are not subject to Executive Order 12372, "Intergovernmental Review of federal programs."

### C. Other Submission Requirements

- (1) <u>Location for Letter of Intent Submission</u>: LOIs are encouraged to be submitted by email to the identified NOAA program element's Program Manager. If an applicant does not have Internet access, LOI hard copies should be sent to the Program Managers listed with each program in the Program Priorities section.
- (2) <u>Location for Application Submission</u>: Applications should be submitted through Grants.gov APPLY (<a href="http://www.grants.gov">http://www.grants.gov</a>). If an applicant does not have Internet access, please contact the CPO Grants Manager (see below) for hard copy instructions.

## V. Evaluation Criteria & Selection Procedures

#### A. Review and Selection Process

Once a full application has been received by CPO, an initial administrative review is conducted to determine compliance with requirements and completeness of the application.

Independent peer mail reviewers, and/or independent peer panel reviewers consisting of both Federal and non-Federal experts will evaluate full proposals in accordance with the evaluation criteria listed below. Only mail reviewers may be used if only a few applications are received. If peer panel reviewers evaluate all proposals, only their ratings may be used to establish the rank order. The panel will give no consensus advice.

Occasionally a reviewer may, due to lack of familiarity in a particular area, choose not to score a particular proposal. The scores from each peer panel reviewer for each proposal will be averaged to produce a single numerical score for the proposal. The average scores for all proposals result in a numerical rank order within each program element.

If peer mail review and peer panel review are both conducted, the available peer mail reviews will be provided to the peer review panel for use in its deliberations prior to providing its ratings.

If only a mail peer review was conducted, the Program Manager will use the rank numerical order of the mail reviews to determine funding recommendations. If only a peer panel review or both a peer panel review and a peer mail review were conducted, the Program Manager will use the numerical rank order of the peer review panel to determine funding recommendations.

The Program Manager will recommend proposals to the Selecting Official in numerical rank order unless the proposal is justified to be selected out of rank order based upon any of the factors listed in the following section. The Program Manager will review the amounts requested for each selected proposal (including costs for computing and networking services) and recommend the total duration and the amount of funding, which may be less than the proposal and budget requested. The Selecting Official will review the recommendations.

#### B. Evaluation Criteria

#### 1. Importance/Relevance and Applicability of Proposal to the Program Goals (50%)

This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities. For the C&GC grant program competition, this includes importance and relevance to the goals of the selected Program Element(s) (see Program Element descriptions above).

#### 2. Technical/Scientific Merit (50%)

This criterion assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives.

## 3. Overall Qualifications of Applicants (0%)

This criterion assesses whether the applicant, and team members, posses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. For the C&GC grant program competition, this criterion is not scored.

#### 4. Project Costs (0%)

This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time frame. For the C&GC grant program competition, this criterion is not scored.

### 5. Outreach and Education (0%)

This criterion assesses whether the project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources. For the C&GC grant program competition, this criterion is not scored.

#### C. Selection Factors

The Selecting Official shall award in rank order unless a proposal is justified to be selected out of rank order based upon any of the following factors:

- 1. Availability of funding
- 2. Balance/distribution of funds
  - a. Geographically
  - b. By type of institutions
  - c. By type of partners
  - d. By research area
  - e. By project types
- 3. Duplication of other projects funded or considered for funding by NOAA/federal agencies
- 4. Program priorities and policy factors
- 5. Applicant's prior award performance
- 6. Partnerships with/Participation of targeted group
- 7. Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendations for funding are made to the Grants Officer.

The Selecting Official makes final recommendations for award to the Grants Officer who is authorized to obligate the funds.

### D. Anticipated Announcement and Award Dates

Subject to the availability of funds, review of proposals will occur during the 5 months following the full proposals due date. We anticipate that funding decisions on proposals will be made by January 2007 subject to/contingent to the final FY 2007 appropriation for NOAA by Congress and final allocation of funds to CPO by NOAA. Funding for successful applicants are expected to begin during spring 2007 for most approved projects. Proposals should use May 1, 2007, as the Start Date unless otherwise directed by the Program Manager.

#### VI. Award Administration Information

#### A. Award Notices

Successful applicants will receive notification that the application has been recommended for funding to the NOAA Grants Management Division. This notification is not an authorization to begin performance of the project. Official notification of funding, signed by a NOAA Grants Officer, is the authorizing document that allows the project to begin. Notifications will be issued to the Authorizing Official and the Principle Investigator of the project. Unsuccessful applicants will be notified that their proposal was not selected for recommendation.

#### B. Administrative and National Policy Requirements

The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements

The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 30, 2004 (69 FR 78389) is applicable to this solicitation.

#### <u>Limitation of Liability</u>

In no event will NOAA or the Department of Commerce be responsible for proposal preparation costs if these programs fail to receive funding or are cancelled because of other agency priorities. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

## National Environmental Policy Act (NEPA)

The National Environmental Policy Act is applicable to the Notice. See Section IV above for the necessary information.

## C. Reporting

Award recipients will be required to submit financial and performance (technical) reports. These reports are to be submitted electronically unless the recipient does not have Internet access, in which case hard copy submissions will be accepted. All financial reports shall be submitted in triplicate (one original and two copies) to the NOAA Grants Officer. Performance reports should be submitted to the appropriate NOAA/CPO Program Manager. All reports will be submitted on an annual schedule. The first technical progress report of a multi-year award is due 9 months after the start date of the award. The comprehensive final report is due 90 days after the award expiration.

### VII. Agency Contacts

Please visit the CPO website for further information <a href="http://www.climate.noaa.gov/or">http://www.climate.noaa.gov/or</a> contact the CPO Grants Manager, Diane Brown, NOAA/CPO, 1100 Wayne Avenue, Suite 1210, Silver Spring, MD 20910-5603

Phone: 301-427-2357 Fax: 301-427-2222

E-mail: <a href="mailto:cpogrants@noaa.gov">cpogrants@noaa.gov</a>